

Evaluation of Position Description

Labor Category/FLSA: Nonexempt

 Current Position Description
 X **Proposed Position Description**

Date Prepared: 06/28/03

Approving Official: Name: Sheryl A. Wheeler

Signature 

Title: HR Specialist

Position Title/Series/Grade: Electronic Industrial Controls Mechanic, WG-2606-10

ORGANIZATION: Division of Property Management

REFERENCES: OPM JGS Production Machinery Mechanic, WG-5350, Nov 80 and
OPM JGS Electronic Industrial Controls Mechanic, WG-2606, April 1987.

DETERMINATION OF SERIES: Subject job involves the installation, maintenance and repair of numerically controlled machine tools, including the mechanical, hydraulic and electronic portions. The electronic portion is the most important for recruitment, selection, placement, and reduction in force purposes. The electronic portion is not covered by reference 1.1 which refers it to the Electronic Industrial Control Mechanic Series, WG-2606. The job is therefore placed in this series and given an appropriate title resembling as closely as possible the title in the handbook. Since the incumbent performs a broad range of functions it is titled Electronic Industrial Controls Mechanic.

DETERMINATION OF GRADE: Maintenance of electronic equipment requires skill which exceeds criteria for this factor at the WG-9 level. Equipment serviced is complex because it involves systems dependency or integration of units constantly changing and has unique characteristics. Systems include miniaturization and amplification, etc. Circuit tracing continually requires use of schematics, blueprints and drawings that present problems in interpretation, analysis or use. Testing equipment and techniques are more extensive than as presented at the WG-9 level. As maintenance electric/electronic repairman, incumbent works with considerable independence in taking actions to expedite repair and reduce equipment "down time." Skill and knowledge and responsibility factors for maintenance of electronic components and systems exceed the W-9 level. Therefore, in application of grading criteria for Electronic Industrial controls Mechanic, WG-2606, job is graded at WG-10 based on the performance of journeyman level.

CONCLUSION: In accordance with the classification practices and titling prescribed in the WG-2606 Series standard. The proper classification for subject job is therefore determined to be Electronic Industrial Controls Mechanic, WG-2606-10.

Installation: National Institutes of Health, Bethesda, MD
Title: ELECTRONIC INDUSTRIAL CONTROLS MECHANIC
Occ Series: 2606
Pay Plan: WG
Grade: 10

Introduction: The Division of Property Management (DPM) serves all of the NIH Community by providing support for renovations, new construction and maintenance of existing facilities, utilities and grounds. The Division provides professional leadership for the engineering programs of the National Institutes of Health (NIH). The scope of DPM operations is such that the effectiveness with which they are carried out has a major and direct effect on the worldwide biomedical research programs of the NIH. In addition to the main facilities at the Bethesda Campus and in Poolesville, MD, NIH has facilities at Research Triangle Park, North Carolina, Rocky Mountain Laboratory in Montana and the Gerontology Research Center in Baltimore, MD.

This position is organizationally located within the DPM in one or more of the subordinate organizational components responsible for the provision of operations and maintenance of NIH facilities. The position is that of an Electronic Industrial Controls Mechanic but also requires the incumbent to be multi-disciplinary and requires the incumbent to be multi-skilled and flexible in the types and complexity of work performed. The position requires that the incumbent be able to work independently and take the initiative to complete the work assigned with a minimum of direct supervision regardless of the nature of the work thus requiring that specific trade skills be shared between staff members.

Duties:

Analyze, repair, maintain, modify, and/or replace fire alarm systems of varying type and complexity throughout the NIH facilities. Systems and components, include, but are not limited to: Fully addressable multi-plexing computer based systems and stand alone electro-mechanical systems and related components as well as trunk-line and transmission equipment, piping, relays and wiring used to transmit alarm signals to central locations such as the Fire Department and Emergency Communications Center. Field equipment includes, but is not limited to: Head end computer equipment, local and remote panels, magnetic door holders, temperature switches, hardware hangers, water flow switches, smoke detectors, smoke controls for air handlers, smoke dampers, fire alarm audible circuits, visual fire lights, amplifiers, fire pull stations, electronic and electro-mechanical relays and door switches to include field wiring connecting equipment.

Analyze, repair, maintain, modify, and/or replace electronically controlled and operated automated material transport systems and related components such as electro-mechanical track type systems and pneumatic tube systems of varying type and complexity throughout the NIH facilities. Systems and components, include, but are not limited to: Mosler "Tele-Lift" material handling system and the Powers "Trans-Logic" computerized pneumatic tube system and all related components. Field equipment includes, but is not limited to: Head end computer and control equipment, local and remote switching stations and control panels, track and tube systems, electronic sensors and switches, electronic and electro-mechanical relays, related or integral mechanical devices, etc. to include field wiring connecting equipment.

Analyze, repair, maintain, modify, and/or replace electronically controlled and operated Closed Circuit TV (CCTV) Monitoring systems, of varying type and complexity throughout the NIH facilities, and related components such as camera and recording systems used for building security and access control. Field equipment includes, but is not limited to: Head end computer and control equipment, local and remote camera and switching stations and control panels, electronic sensors and switches, electronic and electro-mechanical relays, related or integral mechanical devices, etc. to include field wiring connecting equipment.

In addition to electronics work as detailed above, the incumbent may be assigned other General Maintenance Work: Performs a variety of task associated with assisting journeyman level mechanics in the fields of carpentry, electric, HVAC/R, plumbing, pipefitting, masonry and grounds maintenance.

Performs other duties as assigned.

SKILLS and KNOWLEDGE

The incumbent must have the ability to repair, overhaul and calibrate/adjust extremely complex and unique equipment which performs data translation, interpretation and conversion functions such as: digital transmission/communication equipment, electronic interface components, high speed printers, cathode ray terminals, transducers, converters, invertors, central and remote processors, magnetic core, disk and tape data storage systems The incumbent must have a comprehensive trade knowledge of the operating electrical and electronic principles related to the equipment under his responsibility and be familiar with the functional relationships and impact of repairs or modifications on all of the related devices of the equipment services. The incumbent must have the ability to read and interpret complex drawings, wiring diagrams and technical specifications in order to identify and remedy malfunctions in such devices.

Knowledge of the construction, operation, installation, function and service practices for fire alarm systems and associated equipment of all types.

Knowledge of the construction, operation, installation, function and service practices for electronically controlled and operated automated material transport systems and related components of all types.

Knowledge of the construction, operation, installation, function and service practices for electronically controlled and operated Closed Circuit TV (CCTV) Monitoring systems and related components of all types.

Knowledge of the theory and application of NFPA Codes related to fire alarm and sprinkler systems.

General trade knowledge within the trade and skills usually associated with maintenance operations such as carpentry, electric, HVAC/R, plumbing, pipefitting, masonry and grounds maintenance.

The incumbent must be capable of utilizing tools or test devices such as: Signal/frame generators, analog/digital converters, digital volt/ohm/amp meters, decade boxes, for special applications such as: diagnosing communication faults, calibration of field devices, P.C. component alignment, troubleshooting system failure down to component level.

Responsibility:

Receives assignments from supervisor or work leader orally or in the form of written or electronic service orders. Generally receives radio dispatched trouble calls while on call and makes emergency repairs. Incumbent determines the type and extent of repairs needed, methods and techniques to use, parts or components required, and completes work typically with no check in progress. Ensures the end product meets all specified requirements.

Incumbent is responsible for the safe operation of the vehicle following all safety rules, regulations, and traffic signs. Assures that cargo is arranged properly for best support. Incumbent's ability is regularly observed and evaluated, and trip tickets are checked for Compliance with regulations and completeness.

Physical Effort:

Work requires walking, standing, stooping, bending, kneeling, climbing, and working in tiring and uncomfortable positions. Frequently lifts and carries parts and equipment weighing up to 40 pounds; occasionally handles items weighing up to 100 pounds.

Subject to working at high heights.

Working Conditions:

Position may be subject to shift or irregular work hours.

Works inside and outside, exposed to dirt, sewage, dust, grease, fumes, and refrigerant gases. Is subject to injury from use of hand and power tools, and to burns, cuts, bruises, and electrical shock. May be required to wear and/or use protective clothing and equipment in accordance with established health and safety regulations and SOP s.

Works outside and is occasionally exposed to bad weather while loading and unloading vehicle. Is subject to cuts, bruises, and broken bones as a result of accidents while driving or when loading and unloading vehicles. Is exposed to the possibility of serious accidents while driving in all types of traffic and weather